DOW CHEMICAL U.S.A.

30106
Ind SW

TEXAS DIVISION
FREEPORT, TEXAS 77541

March 1, 1981

Mr. Minor Hibbs
Texas Dept. of Water Resources
P. O. Box 13087
Capitol Station
Austin, TX 78711

Dear Mr. Hibbs.

Attached is a proposed revision of the Texas Division TDWR Registration. Major changes were made in Part I, Wastes Generated, by the addition of new disposal options, and in Part III, On-Site Disposal Facilities by the addition of hazardous waste storage sites. A new waste has been added to complete our Part I list of wastes. It is a Class I inorganic waste and has been given a waste sequence number 10. We are proposing these changes in order to more accurately reflect our waste management practices.

As you requested, we have listed below the EPA hazardous waste numbers for each Class I waste. In addition, some of these Class I wastes could be identified with P & U listings.

110730 - D001, D002, D003, K027
150140 - K016, K018, K019, K028, D001
111400 - F003, F005, D001, D003
110570 - F001, F002, D001, D002, K017, K029, K073, K095, K096
#10 - D001, D002, D003, D004, D005, D007, D008, D009, D011, F007, F008, F009

#10 102140 PS

We are submitting these proposals for your review and will be calling at a later date to set up an appointment to come to Austin and discuss these changes with you. In the interim, if you have any questions, please contact Larry Bone or Sandy Henderson at (713) 238-3215.

Sincerely,

K. L. Shewbart

K. L. Shewbart, Manager
Environmental Services

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TDWR

cgc

LIFE IS FRAGILE HANDLE WITH CARE

9525034

NOTICE OF REGISTRATION:
Industrial Solid Waste Generation/Disposal

This is not a permit and does not constitute authorization of any disposal facilities listed below. Requirements for solid waste management are provided by TWQB Order 75-1125-1.

REGISTRATION NUMBER 30106 (supersedes Registration Number 20196)
This number is to provide access to stored information pertaining to your operation. Please refer to this number in any correspondence or reports.

Company Name: Dow Chemical, U.S.A.
Mailing Address: Drawer K, B-2616, Freeport, Texas 77541
Site Location: At Dow Chemical Company's Plant A and B near Freeport, in Brazoria County, Texas
Person in Charge: G. R. Wessels Phone: 713/238-2475
TWQB District: 7 No. of Employees: >100

I. WASTES GENERATED

WASTES GENERATED	CLASS	CODE	DISPOSITION
(SEE ATTACHED SHEET)			

II. SHIPPING/REPORTING Under Chapter 4, TWQB Order 75-1125-1, issuance of shipping-control tickets and monthly reporting are required for off-site disposal of the Class I wastes listed in Part I. The first Shipment Summary Report should be submitted for the month of no later than . Forms and instructions are enclosed for the following wastes now being shipped:

None Identified

ATTACHMENT

I WASTES GENERATED

WASTES GENERATED	CLASS	CODE	DISPOSITION
1. General plant trash (paper and paper products, wood, garbage, metal and plastics)	II	279760	On-site (Landfill)
2. Solid and semi-solid rubble, essentially inert process sludge, ditch cleanings, lime rejects and soil	II	249860	On-site (Landfarm)
3. Non-chlorinated organic liquids, semi-solids, solids; resin liquids and semi-solids	I	110760	On-site (Biologica Treatment, Recover Storage, and Incin eration)
4. Drums containing high viscosity chlorinated hydrocarbons, resins, resin waxes and solids	I	150140	On-site (Landfill)
5. Solid plastics, resins and hydrocarbons	II	280270	On-site (Incinerat
6. Non-chlorinated oils and solvents	I	111400	On-site (Incinerat
7. Chlorinated hydrocarbon liquids	I	110570	On-site (Incinerat
8. Magnesium cell sludge	I	140720	On-site (Landfill)
9. Asbestos	I	179390	On-site (Landfill)

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NOTICE OF REGISTRATION (Continued)
Registration Number 30[illegible]
Company Name Dow Chemical, U.S.A.
Page 2

III. ON-SITE DISPOSAL FACILITIES

1. Dow Site B-1 for the treatment, recovery and disposal of wastes numbers 3, 4 and 8 above.
2. Landfill, Dow Site B-3 for the disposal of waste number 1 and the landfarm of waste number 2.
3. Incineration area, Dow Site B-4 for the disposal of wastes numbers 5, 6 and 7.
4. Dow disposal area Site B-2 a presently inactive lagoon and landfill area.
5. Landfill, Dow site B-3, for the disposal of wastes numbers 1,2,3,4,8

The above identified disposal areas are located on property owned and controlled by Dow Chemical, U.S.A. near the City of Freeport in Brazoria County, Texas adjacent to Segment Number 1111 of the San Jacinto-Brazos Coastal Basin.

IV. RECORDS

A. For purposes of filing annual disposal reports pursuant to Section 4.03 B. of TWQB Order 75-1125-1, records should be maintained for disposal of the following waste(s) listed in Part I:

(SEE ATTACHED SHEET)

B. Proof of recordation in the county deed records as required by Section 1.05, TWQB Order 75-1125-1, should be submitted to the Texas Water Quality Board no later than for the following disposal facilities as listed in Part III:

1. Deed recordation is required for number 1 and 2, Dow Sites B-1 and B-3.

2. Deed recordation for Dow Sites A-1, A-2, B-2, B-4 and B-8 was received by this office on June 11, 1976.

AJ/sdc

DATE October 7, 1976

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IV. RECORDS

1. 279760 Trash
2. 249860 Inert process sludge
3. 110760 Chlorinated and nonchlorinated organic liquids
4. 150140 Drums of orgainc materials
5. 260270 Plastics
6. 111400 Oils and solvents
7. 110570 Chlorinated hydrocarbons
8. 140720 Magnesium cell sludge
9. 179390 Asbestos

ATTACHMENT

I. Wastes Generated

Wastes Generated	Class	Code	Disposition
1. General plant trash (paper and paper products, wood garbage, metal and plastics)	II	279760	On-site (Landfill) (Incineration) Off-site (Reprocessing)
2. Solid and semi-solid rubble, essentially inert process sludge, ditch cleanings, lime rejects, soil, inorganic solids, semi-solids, and slurries	II	249860	On-site (Landfill)
3. Non-chlorinated organic liquids, semi-solids, solids; resin liquids and semi-solids	I	110760	On-site (Incineration) (Reprocessing) (Storage) (Landfill) Off-site (Incineration) (Reprocessing)
4. High viscosity chlorinated hydrocarbons, solids, semi-solids, tars	I	150140	On-site (Incineration) (Reprocessing) (Storage) (Landfill) Off-site* (Incineration)
5. Solid plastics, resins and hydrocarbons	II	280270	On-site (Incineration) (Landfill)
6. Non-chlorinated oils and solvents	I	111400	On-site (Incineration) (Reprocessing) (Storage)
7. Chlorinated hydrocarbon liquids	I	110570	Off-site (Incineration) On-site (Incineration) (Reprocessing) (Storage) Off-site* (Incineration)
8. Magnesium cell sludge	II	140720	On-site (Landfill)
9. Asbestos insulation	I	179990	On-site (Landfill)
10. Inorganic solids, semi-solids, slurries	I		On-site (Landfill)

*Also Off-site Landfill

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ON-SITE DISPOSAL FACILITIES

1. Dow Site B-1 for the treatment, recovery and disposal of wastes numbers 1, 2 and 8.
2. Landfill, Dow Site B-3 for the disposal of wastes numbers 1, 5 and 9.
3. Incineration area, Dow Site B-3 for the disposal of wastes numbers 1, 3, 4, 5, 6 and 7.
4. Dow disposal area Site B-2 a presently inactive lagoon and landfill area.
5. Landfill, Dow Site B-3 for disposal of wastes numbers 3, 4, 6, 7 and 10.
6. Dow Site B-4700 landfill for disposal of waste number 2 (between Dow Site B-1 and B-3).
7. Incinerator area, Dow Block, B-451 for disposal of wastes numbers 3, 4, 6 and 7.
8. Tank storage area, A-1800, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-2400, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-1900, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-1000, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-5000, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-7000, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-410 , Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, A-2800, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, B-2100, Dow Block for disposal of wastes number 3.
   Tank storage area, B-800, Dow Block for disposal of wastes numbers 3, 4, 6 and 7.
   Tank storage area, B-1900, Dow Block for disposal of wastes numbers 4 and 7.
   Tank storage area, B-600, Dow Block for disposal of waste number 7.
   Tank storage area, B-4600, Dow Block for disposal of waste number 7.
   Tank storage area, B-6600, Dow Block for disposal of waste number 7
   Tank storage area, B-1000, Dow Block for disposal of wastes numbers 4 and 7.

last ATTACHMENT 3-1-81

10307
Brazoria

TEXAS DEPARTMENT OF WATER RESOURCES

PERMIT APPLICATION
FOR
INDUSTRIAL SOLID WASTE STORAGE/PROCESSING/DISPOSAL FACILITY Dist 7

PART A - FACILITY BACKGROUND INFORMATION

I. GENERAL INFORMATION

A. Applicant: Dow Chemical Company, U.S.A.
(Individual, Corporation, or Other Legal Entity Name)

Address: B-1226

City: Freeport State: TX Zip Code: 77541

Telephone Number: 713/238-3949

B. Authorized Agents

1. List those persons or firms authorized to act for the applicant during the processing of the permit application. Also indicate the capacity in which each person may represent the applicant (engineering, legal, etc.). The person listed first will be the primary recipient of correspondence regarding this application. Include the complete mailing addresses and phone numbers.

Karen Shewbart, Engineering & Environmental
Darryl Cragar, Engineering & Environmental
Chives Evans, Engineering & Environmental
Ed Aldous, Legal

2. List the individual and his/her mailing address that will be responsible for causing any necessary public notices to be published in the newspaper.

Name: Karen Shewbart

Address: B-1226

City: Freeport State: TX Zip Code: 77541

Telephone Number: 713/238-3949

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3. List the applicant's authorized agent for service.

Name: Karen Shewbart

Address: B-1226

City: Freeport State: TX Zip Code: 77541

Telephone Number: 713/238-3903

C. Operator: Identify the entity who will conduct facility operations. If same as applicant, state "same as applicant."

Name: Same as Applicant

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone Number: _____

D. Ownership

1. Indicate the ownership status of the facility:

a. Private X

(1)	Corporation	X
(2)	Partnership	
(3)	Proprietorship	
(4)	Non-profit organization	

b. Public ____

(1)	Federal	
(2)	Military	
(3)	State	
(4)	Regional	
(5)	County	
(6)	Municipal	

c. Other (specify) _____

2. Is facility and site property owned by applicant?

X Yes ____ No

If you checked "no",

a. Submit as an attachment a copy of the legal description of the facility and/or site property, as appropriate.

b. Identify the facility owner. If same as applicant in Part A above, state "same as applicant." If different from the applicant, please note that the owner is required to sign the application on page 5.

Name: Same as Applicant

Address: _____

City: _____ State: _____ Zip Code: _____

Telephone Number: _____

E. Type of Permit Application:

1. New X
2. Amendment ____ (TDWR Permit Number: _____)

F. Registration and Permit Information

1. Denote your TDWR Solid Waste Registration Number. If none, state "none."

30106

2. Indicate (by listing the permit number(s) in the appropriate column below) all existing or pending State and/or Federal permits or construction approvals which pertain to pollution control or industrial solid waste management activities conducted by your plant or at your location. Complete each blank by entering the permit number, or the date of application, or "none".

Relevant Program and/or Law	Permit No.	Government Agency?
a. Texas Solid Waste Disposal Act	Reg #30106	TDWR
b. Wastewater disposal under the Texas Water Code	TX 00007	TDWR
c. Underground injection under the Texas Water Code	None	
d. Texas Clean Air Act	See Attachment 2.d.	TACB
e. Texas Uranimum Surface Mining & Reclamation Act	None	
f. Texas Surface Coal Mining & Reclamation Act	None	
g. Hazardous Waste Management program under the Resource Conservation and Recovery Act	None	

h.	UIC program under the Safe Drinking Water Act	None	
i.	NPDES program under the Clean Water Act	006403	EPA
j.	PSD program under the Clean Air Act	None	
k.	Nonattainment program under the Clean Air Act	See Attachment 2.d.	TACB
l.	National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act	None	
m.	Ocean dumping permits under the Marine Protection Research and Sanctuaries Act	None	
n.	Dredge or fill permits under section 404 of the Clean Water Act	See Attachment 2.n.	Corps*
o.	Other relevant environmental permits	None	

* Use the following acronyms for each agency as shown below:

TDWR = Texas Department of Water Resources
TACB = Texas Air Control Board
TRC = Texas Railroad Commission
TDH = Texas Department of Health
TDA = Texas Department of Agriculture
EPA = U. S. Environmental Protection Agency
CORPS = U. S. Army Corps of Engineers

G. Description of Business

1. Give a brief description of the nature of your business.

Chemical Manufacturing

2. List the principal products and/or services which are provided by your plant. Please itemize by Standard Industrial Classification (SIC) codes.

SIC CODE	PRINCIPAL PRODUCTS
2812	Alkalies and Chlorine
2813	Industrial Gases
2819	Industrial Inorganic Chemicals
2821	Plastics, Synthetic Resins
2865	Cyclic Intermediates
2869	Industrial Organic Chemicals
2873	Ammonia
3356	Magnesium

ATTACHMENT 2.d.
CONSTRUCTION PERMIT AND NUMBER
TEXAS CLEAN AIR ACT

Name	Number
Chlorothene Storage Tanks	C-119
Chlorothene Storage Tanks	C-120
Chlorohydrocarbon Waste	C-313
Emergency Fuel Oil	C-645
Emergency Fuel Oil	C-646
Propylene Oxide Finishing	C-654
High Purity Olefins Modification	Exempt
High Purity Propylene Storage	C-817
Chlorothene Expansion	C-1258
Sym-Tet Modification (Phase I)	C-770
DETA Storage Tank	Exempt
Methyl Chloroform Pilot Plant	Exempt
Poly IV	C-804
Alkylene Amines Pilot Plant	Exempt
Propylene Oxide Reaction	C-666
Hydrocarbon Cracking Pilot Plant	C-879
Vinyl Ester Resins	C-919
Chloromethanes Production, A-71	C-994
Oxychlorination Pilot Plant	Exempt
Hex Gathering System	C-1091
Biphenyl Purification	C-1312
Fluid Bed Drier #4	C-1407
CO_2 Removal, LHP 6	Exempt
Liquid Versene Reactor	C-1472
Polyethylbenzene Tanks	Exempt
VRE Pilot Plant	Exempt
Urethane Market Development	C-1496
Poly D Pilot Plant	Exempt
HEA and HPA Storage Tanks	Exempt
Chlorine Cell Pilot Plant	Exempt
Mill Creek	657-A
Poly Grease Storage Tanks	Exempt
Propylene Oxide Pilot Plant	Exempt
EDC Drying Facility Pilot Plant	Exempt
Glycerine I Cooling Tower	C-1608
Feed Supplement Expansion	C-1607
Butadiene - Ammonia Recovery	Exempt
Recomissioning Styrene Facility	Exempt
Perchlor Pilot Plant	Exempt
Mag Cell Pilot Plant	Exempt
Voranol Expansion	C-1874
V1V2 Modification	C-1903
Styrene Pilot Plant (EB Cracking)	Exempt
Vinyl Ester Resins Pilot Plant	Exempt
TDI Plant	C-2008
2,3-Dichlorohydrin-Glycerine No. 1	Exempt
Dioxane Expansion - Phase I	C-2051
2-Cyanopyridine Pilot Plant	Exempt
Zn Chloride Waste Abatement	Exempt
Polymer Pilot Plant	Exempt
Epoxy Hardner Pilot Plant	Exempt

Name	Number
EDTA Pilot Plant	Exempt
Ethylene-Ammonia Acrylate Latex Pilot Plant	Exempt
Epichlorohydrin-Ammonia Resin Pilot Plant	Exempt
Phosgenation Pilot Plant (TDI)	Exempt
Oxidation of Propylene-Pilot Plant	Exempt
PCH Reactors - Glycol A	C-2350
Propylene Distillation	Exempt
Chlorine Vent Recovery	C-2394
Power #3-Gas to Oil Conversion	C-2369A-D
Power 4 Gas to Oil Conversion	C-2370A-E
Epi Hydrolyzer Modification - Glycerine I	C-2471
Sym-Tet Modification Phase II	C-2472
Piperazene Pilot Plant	Exempt
Acetylene Expansion	C-2561
Polyol Resin	C-2562
EDTA Pilot Plant	Exempt
Vinylidine Chloride Expansion	C-2606
Gas Oil Conversion Pilot Plant	Exempt
Styrene Storage Tank	C-2689
DETA Storage Tank	Exempt
Polyepi Pilot Plant Expansion	Exempt
1,2,3-Trichloropropane Modification Gly I	C02763
Pichloram Expansion	C-2773
Aqueous NH_3 Storage Tanks	Exempt
Chloromethane Improvements	Exempt
EPI Quat Pilot Plant	Exempt
Monomer Pilot Plant (Phenolphthalein)	Exempt
Tertiary Amyl Alcohol B-39	C-2968
Bisphenol A Expansion	C-2604
Barium Sulfate Reclamation (Mill Creek)	C-657A
Prototype Coating Plant	C-3077
Poly 3 Expansion-Trian C	C-2855
Chloromethanes Pilot Plant A-18	Exempt
Acetylene Modification (CO Production)	C-3233
Polyethylene Flare	Exempt
Liquid Versene Incremental Exp.	C-3164
Power I Expansion	C-3189
Ethylbenzene Pilot Plant	Exempt
Chlorine Liquifaction - A	C-3302
Chlorine Liquifaction - B	C-3301
Industrial Polyglycol Market Development	C-3300
C-5 Dienes	C-3347
Hydrochlorination of Chloropropenes - Pilot	Exempt
Latex Modification	C-3320
Ethylene Recovery Pilot Plant	Exempt
Phenol Recovery	C-3397
EO Pilot Plant	Exempt
Isocyanate Prepolymer Pilot Plant	Exempt
Solvent Condensing Unit Pilot Plant	Exempt
FBD #@ Rehabilitation	Exempt
Epoxy Novolac Expansion	C-3571
Dimethylmorpholine Pilot Plant	Exempt

ATTACHMENT 2.n.

U.S. CORPS PERMITS
THE DOW CHEMICAL COMPANY
1972 - 1980

Permit #	Effective Date	Description
6406-1	10-24-74	Wharf A-2 Maintenance Dredging
6406 Area 85	11-30-77	Wharf A-2 Maintentance Dredging Spoil Area #85
6988-1	6-18-72	Wharf A-8 Construction and Maintenance Dredging
8931	1-27-72	Oyster Creek 2 Pipelines
9020	5-18-72	Oyster Creek 3 Pipelines
9022	5-19-72	Oyster Creek 2 Pipelines
9693	11-07-73	Oyster Creek 8 Pipelines
9694	11-07-73	Oyster Creek 3 Pipelines
9695	11-07-73	Austin Bayou 4 Pipelines
9696	11-07-73	Bastrop Bayou 4 Pipelines
9734-1	10-25-73	Wharf A-1 Maintenance Dredging
9735	11-13-73	Wharf B-6 Maintenance Dredging
9775	11-26-73	Riprap Bank Protection Brazos River - Plant B
9845	1-15-74	Old Brazos River 4 Pipelines
9851	1-22-74	Oyster Creek 1 Pipeline

Name	Number
Bis-Aminoethyl Ether Pilot Plant	Exempt
Pellet Coating Pilot Plant	Exempt
Epoxy Resin Expansion/B-6200	C-3691
Mag Casting - Plant A	Exempt
Allyl Chloride-Epi	C-3740,C-3741 & 3741A
Allyl Chloride Reactor Replacement	Exempt
Continuous Polyepi Pilot Plant	Exempt
Acrylic Acid Acrolein Catalyst Pilot Plant	Exempt
Acrylic Acid Pilot Plant	Exempt
Polyepi Derivatives	Exempt
Mag I, III, & Mag Chlor BOT's	Exempt
Methylene Chloride Expansion	C-3957
Experimental Reactor Allyl-Epi	Exempt
Polyglycerine Thermal Oxidizer	C-4032
Power & Steam Generation	C-3914
N(hydroxyethyl)-Ethylenediamine Triacetic Acid Pilot Plant	Exempt
Furflyhydantion Pilot Plant	Exempt
Modification of Chlorine 3, 4, and 5	C-4020,C-4021,C-4022
Propylene Oxide Reaction	C-4031
Acetylene Smokeless Flare	Exempt
Conversion of Steam to Elect./Compressors at Poly II	Exempt
TDI Incinerator	C-3976
Polybutadiene PP	Exempt
Ethyl Benzene Oil Finishing	Exempt
Propylene Dichloride Hydrogenation Mini Plant	Exempt
PO to EO	Exempt
Emergency Flare B-70	C-4154
Crude Oil Cracker PP	Exempt
Ethylene Glycol B-54	C-4273
EO Modification B-54	C-4310
Styrene I Modernization	C-4370
MEA Storage Tank	Exempt
Polyethylene Pilot Plant	Exempt
Poly IV, Train 3	C-4613
EO Reactors B-13	C-4638
Waste Feed Boiler at Glycerine #1 (supplement to C-2471)	C-4575
Dioxane in T-Amyl Facility	C02968A
Urethane mkt. development modification	C-1496A
Recycle Reactor	Exempt
Catalyst Testing Facility	Exempt
Vinylidene Chloride Purification	C-4934
Power 2 Gas to oil Conversion (4 of 7 boilers)	C-4991(A,B,C)
Cynaopyridine	C-5020
Sym-Tet Day Tanks	C-5191
Tetras Cracking Unit	C-5339
Methylene Chloride	B-5340
Sym Tet #2	C-5268

Name	Number
Latex-Polyol Pilot Plant	Exempt
SO_2 Storage Tank	Exempt
HCl Absorption System	C-5661
Styrene Flare	C-5707, C-5708
HCl Storage Tank A-1600	Exempt
Flare at B-35	C-5762
Ethanol Show Tube	Exempt
Ethylene Amines Pilot Plant	Exempt
Sym Tet Pilot Plant	Exempt
Latex Expansion	C-5162
A-13 Dock	C-6160
Marine Salt Dome Transfer System	C-6161
Acrylonitrile Pilot Plant	Exempt
2 Crude oil tanks at Webster	C-6474
1 Kerosine Naptha Tank at Lomax	C-6475
Styrene Acrylonitide Latex Pilot Plant	X-286
Cl_2 Pilot Plant	X-349
PO Drying Pilot Plant	X-305
Dicyclopentadiene Acrylate	C-919A
New Tank Car Cleaning Facility	C-6383
Ethylene Amines Expansion	C-6382
Chlorinated HC Recovery (Env'l. Op.)	C-6707
Epoxy Storage Tank at Voranol	C-6708
Solvent Storage Tank Poly III	C-6744
Hydrocarbon Recovery (Env'l. Op.)	C-6473
Train 4 Poly III	C-6803
C5 Dienes B	C-6931
Dichloroethyl Ether	C-6892
DCPD Acrylate PP	X-417
EDA Tanks (5)	C-6911
Furnace Relocation LHC #5 and #6	X-423
A-14 Dock	C-7008
Methyl Butynol Tank	X-403
Experimental Mag Cell	X-445
Benzene Modernization (Phase I)	Exempt
Liquid Epoxy Resin PP	X-451
Acrylic Polyelectrolyte PP	X-446
Addendum to Epoxy Resin II	C-7093
Pentachloropyridine Tank	Exempt
Nagnesium Granules	Exempt
MDI Pilot Plant	X-478
Benzene Modernization I (Phase II & III)	Exempt
Glycol Capacity	X-547
Mkt. Development Storage Tanks (2)	Exempt
2 RCl Storage Tanks	Exempt
Diethylbenzene Separation	X-674
Polyethylbenzene Tanks	Exempt
C-5 Diene Soak Tanks	X-469
Ethylene Oxide Optimization	Exempt
HAA Expansion	Exempt
Voranol Hi Moelcular Wt. Polyol	Exempt

Name	Number
D-31 Inhibitor Blend (tk)	Exempt
Nitroethane tk	Exempt
Methyl Butynol tk	Exempt
Bisphenol Purification Miniplant	Exempt
Cl_2 M-121 to M-83	X-689
Cracking Furnace LHC #7	C-690
HCL Column	X-667
Magnesium Prod. Development Pilot Plant	X-682
A-16 Incinerator	C-7448
Market Development Capped Polyol	Exemot
Partial Combustion Cracker	C-7523
Relocation EDC TC & TTLdg	X-731
Polycarbonate	C-7531
PDC Purification	Cancelled
DETA Production	X-765
Ethylene Amines Reactor Pilot Plant	X-766
Poly IV Modification	Cancelled
Pentene Nitrile Pilot Plant	X-775
Piperazine Tank	X-794
2 Storage Tanks at Chloropyridines	X-792
PDC Recovery (B)	C-7591
Hydrocarbon Recovery (Permit Amendment)	Exempt
Tank Car Cleaning (Amendment)	Exempt
Latex Tanks	X-791
Epi Expansion	Exempt
Solvent Storage Tank Poly IV	X-790
2 Storage Tanks at Chloropyridines	X-845
Titanium Sponge Pilot Plant	X-904
Mag A Rehabilitation	X-955,X-956
C-5 Dienes B-Add'n Flare	X-6932A
Epi Storage Tank (Ch. in service)	X-959
Plant B Power Expansion	C-7871
DETA Pilot Plant	X-1030
Alpla-Piccline Pilot Plant	X-1040
Ballast Water Tank	X-1069
2 Storage Tanks & loading rack	Exempt
Epi and Water Tank in B-62	X-1076
Feed Processing (Experimental Mag Cell A)	X-1089
LHC #5 Furnace	X-1093
LHC #5 Furnace	X-1181
Heavies Col-Alpha Di	X-1123
Tank Ch. to Epi Service	X-1179
Allyl Alc. Tank-Market Development	X-1158
LPG Station	X-1152
Fluid Bed Combustor Pilot Plant	X-1153
Amines Flash Mini Plant	X-1163
Direct Neutralizer Tanks	Exempt
Heat Recovery Unit	C-8026
Direct Neutralizer	Exempt
Polyethylbenzene OP at Plant B	Exempt

Name	Number
100 M Bbl. Ballast H_2O Tank	X-1203
2 RCl Storage Tanks for Cell Feed B	Exempt
200 M Bbl Gasoline	Exempt
Methyl Butynol (change tank size)	Exempt
Epi to Telone II (change of service)	X-1486
Specialty Isocyanate Reactor and Storage	Exempt
Polyglycol Storage Tank	X-1566
Kerosine Storage Tank	X-1567
Linear Alpha-Olefin Pilot Plant	X-1610
High RCl Iron Tank	X-1644
Solid Waste Incinerator	Exempt
Organo-Asbestos Diaphragm	
Pyrazine Pilot Plant	
Carcking Catalyst Pilot Plant	Exempt
Compartmental Tank Truck Loading	

* Non-attainment permits

Permit #	Effective Date	Description
10175	10-17-74	Wharf A-8 Dredging
10175-1	9-07-76	Wharf A-8 Maintenance Dredging
10175-2	3-30-78	Wharf A-8 Maintenance Dredging
10190	12-09-77	Wharves A-4 and A-5 Maintenance Dredging
10414	3-13-75	Oyster Creek 1 Pipeline
10510	5-14-75	Oyster Creek 1 Pipeline
10511	5-06-75	Oyster Creek 5 Pipelines
10607	9-18-75	Wharves A-13 and A-14 Construction & Dredging
10683	6-18-75	Oyster Creek 5 Pipelines
11121	3-25-76	Barge Mooring Area & Dolphins Dredging
11364	8-20-76 (Rev. 4-29-77)	Oyster Creek 3 Pipelines
12400	12-06-77	Wharf A-6 Maintenance
12621	3-30-78	Oyster Creek 1 Pipeline
12747	7-24-78	Wharf A-3 Amendment of CE Permit 4789
13054	10-24-78	Restoration of South Bank of Oyster Creek near FM 523
13295	2-20-79	Floating Boat Dock Brazos River
13632	10-03-79	Wharf A-16 Old Brazos River Channel Construction Dredging

Permit #	Effective Date	Description
13744	10-15-79	Wharf A-15 Construction Dredging
14193	4-03-80	Oyster Creek 1 Pipeline
14233	4-28-80	Dolphins - Repair of 4 near Wharf A-15 and Skimmer Gate

FLC
8-4-80

II. SITE BACKGROUND INFORMATION

A. Location of Site

1. Facility Name: Dow Chemical Company, Texas Division

Street Address, if available: B-1226

Freeport County: Brazoria

2. Are your waste management operations within the extraterritorial jurisdiction of a municipality?

____ Yes X No

If you checked "yes," what municipality?_____

3. Give a verbal description of the location of the facility site with respect to known or easily identifiable landmarks.

The facility is located on property owned and controlled by Dow Chemical U.S.A. in Brazoria County, Texas approximately 8 miles from the Gulf of Mexico. The city of Clute is located approximately 2 miles to the north. Velasco and Freeport are approximately 2 to 3 miles to the east.

4. Detail the access routes from the nearest U.S. or State Highway to the facility site.

The facility can be reached by proceeding south from Angleton on State Highway 288 to the city boundaries of Freeport. From there one must travel on private roads owned by Dow to reach the facility.

5. Submit as "Attachment A" a United States Geological Survey (USGS), 7½ minute quadrangle map. Indicate on this map the location of the site and the land use patterns of the areas within ¼ mile (1.6 km) of the site boundaries (e.g., residential, commercial, recreational, agricultural, undeveloped, etc.). Each area of land use should be labeled on the map. (Note: If such a map is not available, submit a substitute map such as a State Department of Highways and Public Transportation county map with sufficient scale to adequately show the site location and surrounding land use patterns.

6. a. Submit as "Attachment B" a map indicating the boundaries of all adjacent parcels of land, and a list of the names and mailing addresses of all adjacent landowners and other nearby landowners who might consider themselves affected by the activities described by this application. Cross-reference this list to the map through the use of appropriate keying techniques. The map should be a USGS map, a city or county plat, or another map or drawing with a scale adequate enough to show the cross-referenced affected landowners.

b. Indicate from what source(s) the names and addresses of persons identified as affected were obtained:

City _____
County _____
School District _____
Water District _____
Abstract Co. X
Other (specify) _____

7. Enter the geographical coordinates of the site:

Latitude: 28 deg 59 min 10 sec

Longtitude: 95 deg 25 min 2 sec

8. Is the facility located on Indian lands? Check one:

____ Yes __X__ No

B. Legal Description of Site

Submit as "Attachment C" a legal description of the entire tract of land upon which the waste management operations referred to in this permit application occur or will occur.

C. Site Environmental and Technical Information

1. Climatic and Hydrologic

a. Is any portion of your waste management facility site (including proposed, active, and inactive portions) subject to flooding from adjacent or nearby surface water bodies under the following conditions?

24-hr Rainfall Event	Yes	No
5-year	___	X
50-year	___	X
100-year	___	X

b. Are there any producing groundwater wells on your site property?

__X__ Yes ____ No

If you checked "yes"

(1) Indicate the number of such wells: 11, and

b. Indicate the corresponding water uses below:

(a) Industrial uses:
Cooling water ____
Process water ____
Fire-control water ____

(b) Potable (drinking) water 10

(c) Agricultural uses:
Irrigation water for livestock food crops or grazing land ____
Livestock watering 1
Irrigation water for human food crops ____

c. Are any adjacent or nearby surface waters utilized by the applicant?

X Yes ____ No

If you checked "yes," indicate the corresponding water uses below:

(1) Industrial uses:
Cooling water X
Process water X
Fire-control water X

(2) Potable (drinking) water X

(3) Agricultural uses:
Irrigation water for livestock food crops or grazing land ____
Livestock watering ____
Irrigation water for human food crops ____

2. Site Land Use and Subsidence Information

a. Is any portion of the overall site property utilized for agricultural purposes?

____ Yes X No

If you checked "yes," indicate the corresponding uses below:

(1) Grazing ____
(2) Livestock food crop ____
(3) Human food crop ____
If you checked no. (2) or (3), specify the types of crops grown. ____

b. Is any portion of the overall site property subject to land subsidence?

____ Yes X No

IF THE PAGE FILMED IS NOT AS LEGIBLE AS THIS LABEL, IT IS DUE TO THE QUALITY OF THE ORIGINAL.

If [illegible] estimate the [illegible] the greatest subsidence that has occurred (in units of [illegible]). ____

III. WASTES AND WASTE MANAGEMENT

A. Waste Generation and Management Activities

Is any hazardous industrial solid waste (see Title 40, Code of Federal Regulations, Part 261) presently or proposed to be generated at your facility?

_X_ Yes ___No

If you checked "no," go to Section III.B.2 below.
If you checked "yes," answer the following question.

1. Are you presently registered with TDWR as a solid waste generator?

   _X_ Yes ___No

   If you checked "no," contact the Solid Waste Section of TDWR in Austin, Texas to obtain registration information. Also, continue with the application form (go to Number 2 below).

   If you checked "yes," go to Section I of your Notice of Registration, determine which of your wastes are hazardous, and list these wastes (and mixtures) in Table III-1 (see Number 2 below).

2. Complete Table III-1 below, listing all hazardous wastes and all mixtures containing any hazardous waste which are presently or proposed to be generated at your facility. (see 40 CFR 261.31-33), attaching additional copies as necessary.

   In this table, "TDWR Sequence Number" refers to the number in the left-hand column in Section I of your Notice of Registration (Note: if you are not registered with TDWR, enter "NA" for TDWR Sequence Number and TDWR Waste Code Number).

   For the EPA Hazard Code and EPA Hazardous Waste Numbers, see 40 CFR 261.30-33. For annual quantity, provide the amount in units of pounds (as generated) for each waste and/or waste mixture.

   Please group the listings of wastes by SIC code, insofar as your processes are designated by SIC codings. Also, within the general SIC code groups, give a brief description of the specific process or operation from which the waste has been generated.

B. Waste Management Facilities Summary

1. For each waste and waste mixture listed in Table III-1 that is presently or proposed to be managed on-site, provide the summary sheet shown in Table III-2 (Note: you must make copies of Table III-2 and submit the completed set of tables as "Attachment D").

0142

Table III-3 Inactive Hazardous Industrial Solid Waste Management Facility Components

Indicate the inactive facility components which were used for storage/processing/disposal of hazardous wastes or mixtures containing any hazardous waste by entering the number of such facility components in the space provided.

___ Lagoon/Pond (lined)
___ Basin (earthen, above-grade lined)
___ Basin (earthen, above-grade unlined)
___ Basin (earthen, below-grade lined)
___ Basin (earthen, below-grade unlined)
___ Basin (concrete, above-grade lined)
___ Basin (concrete, above-grade unlined)
___ Basin (concrete, below-grade lined)
___ Basin (concrete, below-grade unlined)
___ Basin (other)
___ Pit (lined)
___ Pit (unlined)
___ Incinerator
___ Open Controlled Incineration Area
___ Boiler (energy-producing)
___ Landfill (sanitary)
___ Landfill (surface, open)
___ Landfill (other)
___ Landspreading Area
___ Spray Irrigation Area
___ Flood Irrigation Area
___ Septic Tank/Drain Field
___ Injection Well
___ Tank (surface storage)
___ Tank (sub-surface storage)
___ Tank (surface processing)
___ Tank (sub-surface processing)
___ Tank (other)
___ Drum Storage Area (open)
___ Drum Storage Area (enclosed)
___ Drum Storage Area (other)
___ Bulk Storage Area (open)
___ Bulk Storage Area (enclosed)
___ Bulk Storage Area (other)
___ Other (specify _____
_____)

Table III-4 Hazardous Waste Facility Components List

Facility Component Name	TDWR Seq. No.	Status: Inactive	Active	Proposed	Design Capacity: (cu yds)	(gal)	(lbs)	Number of Years Utilized	Date in Service
34 Block Landfill	1,2,3	X					1,000,000	5	1945-50
Description: First landfill in the Texas Division; Caustic wastes and other process wastes were disposed of at this site, along with lumber, trash and drummed materials.									
35 Disposal Area (A-41 Block)	1,2,3,8	X					1,253,300,000	20	1953-
Description: A 34 acre landfill used to bury magnesium sludge, general trash and lumber, R-cake from the mag process, solids from riverwater treating, and miscellaneous organics. Radioactive wastes were also disposed of in this area under license.									
36 Disposal Are (6 pits)	4,7	X					56,010,000	6	1970-76
Description: The A-2 site (30 acres) was a series of six earthen pits (150' x 200' x 10') used to impound chlorinated hydrocarbons. In 1975 Dow began removing the chlorinated hydrocarbons and using them as feedstock for our Thermal Oxidizer to produce HCl for the production of magnesium.									
Disposal Area (12 pits)	3,4,5,7	X					164,200,000	8	1973-80
37 Description: In 1975, we began removing chlorinated hydrocarbons and using them as feedstock for our Thermal Oxidizer to produce HCl for the production of magnesium. The top water from the pits was returned to the waste treatment plant. The emptied ponds are filled with construction rubble and covered with clay. A 10-acre tract was used as a landfill for disposal of drums containing resins, waxes, and chlorinated materials.									
Site B-2	3	X					220,000,000	29	1944-73
38 Description: Two 3 acre lagoons which impound approximately 22 million gallons of styrene tars. Dow anticipates recovering these tars at some future date.									
-27 Block	2,8	X					200,000		1948-52
38 Description: Area used between 1948 and 1952 for construction debris, magnesium sludge and other process wastes.									

F-106

TABLE III-4 HAZARDOUS WASTE FACILITY COMPONENTS LIST

Facility Component Name	TDWR Seq. No.	Status: Inactive	Active	Proposed	Design Capacity: (cu yds)	(gals)	(lbs)	Number of Years Utilized	Date of in Service
WDW 59	2,3	X					26,000,000	3	1970-73
Verbal Description: Plant "B" Disposal Well #1 is located in the B-1700 Block and was permitted 8/69 to dispose of aqueous solutions of inorganic and organic wastes from the Glycerine Plant. Wastes were injected between 5778'-5864'. The well was plugged in 3/77 with 2535 cubic feet of cement.									
WDW 71	2,3	X					3,800,000	4	1971-75
Verbal Description: Plant "B" Disposal Well #2 located in the B-6200 Block, permitted in 1971 to dispose of aqueous solutions of inorganic and organic wastes from the Epoxy Plant. Wastes were injected betweek 6200'-6400'. The well was plugged in 11/79.									
WDW 81	2,3,4,7	X					12,000,000	3	1971-74
Verbal Description: Plant "A" Disposal Well #1 located in the A-38 Block, permitted in 1971 to dispose of aqueous solutions of inorganic and organic wastes from Glycol A and Ethylene Dichloride Plants. Wastes were injected between 6295'-6356'. The well was plugged 12/79.									
B-5 Landfill	3,4,6,7,10		X				880,000,000*	1.5	12/1980
Verbal Description: A 10-acre landfill for the disposal of hazardous wastes according to RCRA definition. TDWR Facility #5									

*2000 acre-ft

F-106

TABLE III-4 HAZARDOUS WASTE FACILITY COMPONENTS LIST

Facility Component Name	TDWR Seq. No.	Status: Inactive	Active	Proposed	Design Capacity: (cu yds)	(gals)	(lbs)	Number of Years Utilized	Date in Service
08 B-451 Incinerator	3,4,6,7		X				75 lb/hr	6	6/26/76
Verbal Description: Solids incinerator for burning solid chlorinated and non-chlorinated wastes TDWR Facility #7									
09 T-20 Tank	4,7		X			30,000		2.5	1/80
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K028 TDWR Facility #9									
09 T-300 Tank	4,7		X			30,500		5	6/77
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K029 TDWR Facility #9									
10 D-201 Tank	4,7		X			2,370		4.5	10/77
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K073 TDWR Facility #15									
11 D2B & D2C Tank	4,7		X			20,000		16	66
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K019, K028 TDWR Facility #15									
17 T1A Tank	3,4,6,7		X			17,000		3	79
Verbal Description: Storage tank for chlorinated & non-chlorinated hydrocarbons - hazardous hazardous waste D001 - TDWR Facility #17									

F-106

TABLE III-4 HAZARDOUS WASTE FACILITY COMPONENTS LIST

Facility Component Name	TDWR Seq. No.	Status: Inactive	Active	Proposed	Design Capacity: (cu yds)	(gals)	(lbs)	Number of Years Utilized	Date in Service
13 V1 Tank	4,7		X			15,500		10	72
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste - D001 K017, K020, K030, K073 - TDWR Facility #17									
14 V2 Tank	4,7		X			7,500		10	72
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K016 TDWR Facility #17									
15 V6 Tank	4,7		X			5,800		1	81
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K019 TDWR Facility #17									
16 D-4 Tank	7		X			4,200		2	80
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste D001 TDWR Facility #17									
21 D-5 Tank	7		X			4,200		2	80
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste D001 TDWR Facility #17									
New T1 Tank	3,4,5,7			X		35,000		-	-
Verbal Description: Storage tank for chlorinated & non-chlorinated hydrocarbons TDWR Facility #17									

RECEIVED SEP 9 1987 PERMIT CONTROL TDWR

F-106

TABLE III-4 HAZARDOUS WASTE FACILITY COMPONENTS LIST

Facility Component Name	TDWR Seq. No.	Status Inactive	Active	Proposed	Design Capacity (cu yds)	(gals)	(lbs)	Number of Years Utilized	Date in Service
New V1 Tank	3,4,5,7			X		35,000		-	-
Verbal Description: Storage tank for chlorinated & non-chlorinated hydrocarbons TDWR Facility #17									
1208 Tank	4,7		X			18,000		5.5	10/76
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K017 TDWR Facility #18									
1209 Tank	4,7		X			18,000		5.5	10/76
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K017 TDWR Facility #18									
V-1000 Tank	7		X			6,375		2	11/80
Verbal Description: Tank used for phase separation of chlorinated hydrocarbons & water hazardous waste - K030 - TDWR Facility #14									
V-1001 Tank	7		X			14,000		2	11/80
Verbal Description: Tank used for phase separation of chlorinated hydrocarbons & water hazardous waste K030 TDWR Facility #14									
V1 Tank	7			X		23,000		-	-
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K030 Not presently in use - TDWR Facility #									

F-106

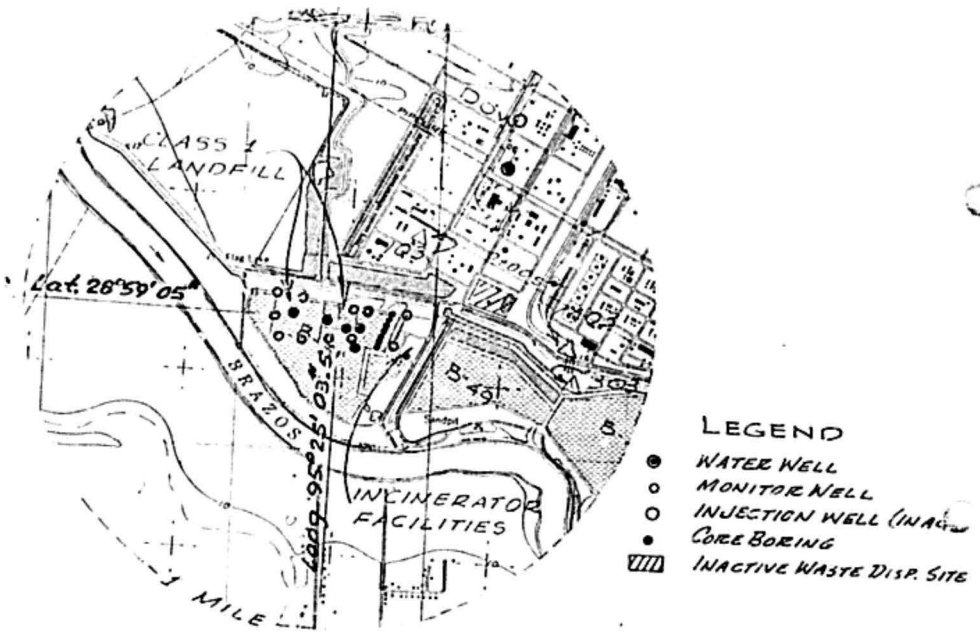
TABLE III-4 HAZARDOUS WASTE FACILITY COMPONENTS LIST

Facility Component Name	TDWR Seq. No.	Status Inactive	Active	Proposed	Design Capacity (cu yds)	(gals)	(lbs)	Number of Years Utilized	Date in Service
V2 Tank	7			X		11,000		-	-
Verbal Description: Storage tank for chlorinated hydrocarbons - hazardous waste K030 Not presently in use - TDWR Facility #									
RCl Separator Facility	7		X			57600/day (water)		2.5	3/80
Verbal Description: Series of tanks and vessels used to separate RCl's and water Tank #'s S-50,S100A,S-100B used for phase separation; VF-101,VF-102 are water check tanks, VF-110,VF-111 are RCl storage tanks, 6H-113 RCl vapor storage, T-100 - effluent steam stripper - TDWR Facility #3									
Oil Separator Facility	6		X			57600/day (water)		2.5	3/80
Verbal Description: Series of tanks & vessels used to separate oil and water - tank #'s S-250, S-200A, S-200B used for phase separation, VF-210 used for oil storage - TDWR Facility #3									
Incinerator Feed Tanks	6		X			31,000		15	67
Verbal Description: Storage tanks used to hold non-chlorinated waste for incineration. Tank #'s V 1, V-302, V-303, D-301, D-302 - TDWR Facility #3									
Liquid Incinerator W/Scrubber	7		X			1.2 gpm		15	67
Verbal Description: Incinerator with scrubber used to burn chlorinated organic liquids - TDWR Facility #3									
Liquid Incinerator	6		X			3 gpm		15	67
Verbal Description: Incinerator without scrubber used to burn non-chlorinated organic liquids - TDWR Facility #3									
ECP 1100	3,4,6,7		X				990/hr	2.5	12/80
Verbal Description: Incinerator with scrubber used to burn chlorinated and non-chlorinated organic liquids									

F-106

TABLE III-4 HAZARDOUS WASTE FACILITY COMPONENTS LIST

Facility Component Name	TDWR Seq. No.	Status Inactive	Active	Proposed	Design Capacity (cu yds)	(gals)	(lbs)	Number of Years Utilized	Date of In Service
ECP 2500's	3,4,6,7			X			6000/hr	-	-
Verbal Description: Two incinerators used to burn non-chlorinated organic liquids and solids. Not in service yet - TDWR Facility #3									
Liquid Incinerator	6,7			X		5 gpm		-	-
Verbal Description: Incinerator used to burn non-chlorinated organic liquids. Not in service yet - TDWR Facility #3									
19 D-284 Tank	6		X			5000		1	4/81
Verbal Description: Storage tank for non-chlorinated hydrocarbons - Hazardous Waste D001 - TDWR Facilit, #									
32 Mix Boxes			X			250,000		6	76
Verbal Description: In-stream neutralization devices utilizing a series of baffles for mixing A-511, #1, #2, large, small mix boxes									
B-1038 Storage	3,4,6,7		X			50,000		3	10/79
Verbal Description: Container storage area for hazardous waste - TDWR Facility #22									
Verbal Description:									



ATTACHMENT E-1

SIC Code 2819

Typical Waste Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Spent halogenated solvents in degreasing	Inorganic Products	110570	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator with scrubber
Spent halogenated solvents and the still bottoms	Inorganic Products	110570	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator with scrubber
Spent CH_3OH, Toluene, MEK, CS_2, Isobutanol, Pyridine	Inorganic Products	111400	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator

[illegible] Description	Origin of Waste	TDHR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Epoxy resins in non-halogenated solvents	Resins Research	110760	55 gallon drum or liquid dempster	--	Dow Transport or Dempster service	Incinerator
Waste Polyethylene saturated with Isopar and iso-octane	Polyolefin/Poly-carbonate Research	110760	Fiberpak	--	Transport	Incinerator
Epoxy resin waste in acetone	Resins Research	110760	55 gallon drum	--	Transport	Incinerator
Waste Derakane® resin in methylene chloride solvent	Resins Research	110760	Fiberpak	--	Transport	Incinerator with scrubbe
Waste additive solution	Polyethylene 2	111400	Liquid dempster	--	Dempster service or vacuum truck	Incinerator
Kerosene and oil	Poly Packaging	111400	Vacuum Truck	Oil/water separator system	Vacuum truck	Oils-incin. Aqueous wast -- biopond
XD 7080 Prepolymer	Acrylic Polymers	110760	Liquid Dempster		Dempster Service	Incinerator
Butyl acrylate; vinyl acetate liquid	Polyolefin/Poly-carbonate Research	110760	Liquid Dempster	--	Dempster Service	Incinerator
Peroxide initiator in iso-octane solvent	Polyolefin/Poly-carbonate Research	111400	Liquid Dempster	--	Dempster Service	Incinerator
2,2-Dimethylthiazolidine bottoms and lights	Acrylic Polymers	110760	Liquid Dempster	--	Dempster Service	Incinerator
T-butyl glycidyl ether [illegible]toms	Acrylic Polymers	110760	Liquid Dempster	--	Dempster Service	Incinerator
Tertiary butanol	Acrylic Polymers	111400	Liquid Dempster	--	Dempster Service	Incinerator
Liquid waste catalyst with Isopar E, 1-12 organic peroxides	Low Density Polyethylene	111400	55 gallon drum	--	Transport	Incinerator

Waste Description	Origin of Waste	IDWR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Iso-octane	Polyethylene Solution Process-Resins Res.	111400	Liquid Dempster	--	Dempster Service	Incinerator
Sump wastes, 95% H_2O, P.E. solvent-iso-octane	Polyethylene Solution Process-Resins Res.	111400	Liquid Dempster	--	Dempster Service	Incinerator
Dowanol EEA kettle wash	Resins Research	110760	55 gallon drum, liquid dempster	--	Transport/Dempster Service	Incinerator
Styrene Process Waste	Resins Research	110760	Fiberpak	--	Transport	Incinerator
Trimethyl amine, liquid raw material	Dowex WGR	110760	Liquid Dempster	RCI/Waste Separation System	Dempster Service	RCI's-Incin. Aqueous Waste - Bioponds
Water with $MeCl_2$, HCl, Triethylene amine, 4-dimethylaminopyridine	Polycarbonate Pilot Plant	110570	Liquid Dempster	RCI/Water Separator System	Dempster Service	RCI's-Incin. Aqueous Waste - Bioponds
Low molecular weight polyethylene copolymers	Polyethylene 1	110760	Liquid Dempster	-	Dempster Service	Incinerator
Waste catalyst and mineral oil	Polyethylene 1	110760	Liquid Dempster	--	Dempster Service	Incinerator
Waste initiator (catalyst) solution	Polyethylene 2	110760	Liquid Dempster	--	Dempster Service	Incinerator
Polyethylene copolymer kerosene solutions	Polyethylene Packaging	110760	Liquid Dempster	--	Dempster Service	Incinerator
XD 7080.01, XD 7080.00, amino ethylated acrylic polymer	Acrylic Polymers	110760	Liquid Dempster	--	Dempster Service	Incinerator
Vazo 64, flammable solid/empty Vazo 64 containers	Acrylic Polymers	110760	Fiberpak	--	Transport	Incinerator
Fine particle catalyst in Isopar E slurry-waste catalyst	Low Density Polyethylene	110760	Liquid Dempster	Metals deactivated with water in dempster	Dempster Service	Incinerator

Waste Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Out-of-spec vinyl resins and ester	Resins Research	110760	Fiberpak	--	Transport	Incinerator
DMT/caustic waste	Acrylic Polymers	150140	Caustic steel dempster	--	Dempster Service	Haz. Landfill
Blowdown, contains waste oil, vinyl acetate, acetic acid	Polyethylene 1	111400	Liquid dempster/vacuum truck	Oil/water Separator System	Dempster Service/ Vacuum Truck	Incinerator
Waste monomers-acrylates, styrene, vinyl acetate, ethers, alkanes	Low Density Polyethylene	110760	Liquid Dempst.	--	Dempster Service	Incinerator
Waste metal alkyls (mag alkyls, aluminum alkyls)	Polyolefin/Polycarbonate Research	150140	Fiberpak	--	Transport	Haz. Landfill
Spent Halogenated Solvents in Degreasing	Plastics & Resins	110570	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator with scrubber
Spent Halogenated Solvents and the Still Bottoms	Plastics & Resins	110570	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator with scrubber
Spent Xylene, Acetone, Ethyl Benzene and Ethyl Ether	Plastics & Resins	111400	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator with scrubber
Spent CH_3OH, Toluene, MEK, CS_2, Isobutanol, Pyridine	Plastics & Resins	111400	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	Incinerator with scrubber
Acrylic Acid	Plastics & Resins	110760	Liquid dempster	--	Dempster Service	Incinerator
Aniline	Plastics & Resins	110760	Fiberpak	--	Transport	Incinerator

SIC Code 2821 (page 4)

Generic Waste Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intermediate Processing	Transportation Method	Final Disposal
1-Chlor-2,3-Epoxypropane	Plastics & Resins	None	Drums	--	Transport	[8]THROX or [7]Thermal oxidizer
Toluene Diisocyanate	Plastics & Resins	110760	Fiberpak	--	Transport	Incinerator

SIC Code 2865

ATTACHMENT 6 -- PROCESS FLOW DIAGRAM

Waste Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Crude ethylbenzene	Styrene & Aromatic Chemicals Research	111400	55 gallon drum	--	Transport	Incinerator
Clay absorbant with aromatics	Styrene & Aromatic Chemicals Research	110760 or 150140	Fiberpak	--	Transport	Incinerator or Haz. Landfill
Ditch skimmer-ethylbenzene and styrene from spills	Styrene 2	110760	55 gallon drum	--	Transport	Incinerator
Spill cleanup (saw dust) from any type of chemical spill	Styrene 2	110760	55 gallon drum	--	Transport	Incinerator
Lab wastes-acrylates, mainly methyl acrylate	Organic * Products Systems Research	110760	Fiberpak	--	Transport	Incinerator
Cracking Catalyst	Cracking Catalyst	150140	Sludge Dempster	--	Dempster Service	Haz. Landfill
Crude Styrene	Styrene & Aromatics Chemicals Research	111400	55 gallon drum	--	Transport	Incinerator
Spent Xylene, acetone, ethyl benzene and ethyl ether	Cyclic Crude	111400	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	*Incinerator
Spent CH_3OH, Toluene, MEK, CS_2, Isobutanol, Pyridine	Cyclic Crude	111400	Drum, can, fiberpak, liquid dempster	--	Transport or Dempster Service	*Incinerator
Benzene	Cyclic Crude	110760	Liquid dempster	--	Dempster Service	Incinerator

*Sometimes reprocessed at Styrene Production

SIC Code 2869 (page 1)

Material Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Tar	Hydrocarbons & Energy Research	111400	Fiberpak	--	Transport	Incinerator
Mixed amines-yellowish liquid which yields fumes in water	Process Research and Engineering	110760	55 gallon drum	--	Transport	Incinerator
Paint thinner	Maintenance	111400	55 gallon drum	--	Transport	Incinerator
Used Varsol, liquid cleaning oil	Instrument Services	111400	55 gallon drum	--	Transport	Incinerator
Used Varsol, liquid shop solvent, like kerosene	Research Maintenance	111400	55 gallon drum	--	Transport	Incinerator
Methylamine	Marine Terminal	110760	55 gallon drum	--	Transport	Incinerator
Morpholine	Warehousing Dept.	110760	55 gallon drum	--	Transport	Incinerator
Filter elements from hydrocarbon service	Aromatics and Dienes	110760	Fiberpak	--	Transport	Incinerator or Haz. Landfill
Polymer from towers	Aromatics & Dienes	110760	Fiberpak	--	Transport	Incinerator
Solid heat exchanger and hydrocarbon tower polymer	Butadiene	110760	Fiberpak	--	Transport	Incinerator
Coke and polymer solid - from tube bundle & towers	LHP 5	110760 or 150140	55 gallon drum with liner and water	--	Transport	Incinerator or Haz. Landfill
Denatured alcohol liquid wash process equipment	LHP 5	111400	Liquid dempster	--	Dempster Service	Incinerator

ATTACHMENT G -- PROCESS FLOW DIAGRAM

[illegible] Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intermediate Processing	Transportation Method	Final Disposal
Used ethanol for equipment washing	LHP 6	111400	Liquid dempster	--	Dempster Service	Incinerator
Waste oil and non-chlorinated solvents	LHP 6	111400	Liquid Dempster	--	Dempster Service	Incinerator
Polymer, solid tower cleaning, carbon-polymer	LHP 6	110760 or 150140	55 gallon drum with liner & water	--	Transport	Incineration or Haz. Landfill
Waste ethanol, refrigeration system solvent	LHP 7	111400	Liquid Dempster	--	Dempster Service	Incinerator
Hydrocarbon polymer, rubber-like solid, pyrophoric polymer	LHP 7	110760 or 150140	Fiberpak with liner and water	--	Transport	Incineration or Haz. Landfill
Water from ditches contaminated with HCl, NaOH, sand	Chlor-Methanes	110570	Ditch	Chlor methanes seperated from water and put in vacuum truck	Vacuum Truck	Incineration & NPDES Permitted Outfall
PDC-DCIPE (light and heavy ends from PDC purification)	PDC Finishing	None	Pipeline	--	Pipeline	[6] Acid Furnaces or Mag (Direct Neutralizer)
DCEE bottoms-dichloroethyl ether	Glycol B	None	Vacuum Truck	RCI/water separator system	Vacuum Truck	[7] RCI's-Thermal Oxidizer -- Aqueous waste - Bioponds

ATTACHMENT G -- PROCESS FLOW DIAGRAM

Waste Description	Origin of Waste	TDWR Waste Code Number	Collection Method	Intemediate Processing	Transportation Method	Final Disposal
Waste liquid from flare knockout pot	Propylene Oxide Purification	110760	Vacuum Truck	--	Vacuum Truck	Incinerator
Lab waste-chlorinated hydrocarbons (EDC, PDC, DCEE)	Glycol Quality Lab	110570	Vacuum Truck	--	Vacuum Truck	Incinerator with scrubber
Fischer reagent, mixture of methanol, acetic acid, and pyridine	Ethylene diamine	110760	Fiberpak	--	Transport	Incinerator
Epichlorohydrin still overhead light product-IPC, PDC, allyl chloride	Epichlorohydrin	None	Pipeline	--	Pipeline	8_{THROX}
Distillation overhead from the separation of chlorinated propenes	2,3-Dichloropropene	None	Pipeline	--	Pipeline	8_{THROX}
Allyl chloride tars	Soil Fumigants	None	Pipeline	--	Pipeline	8_{THROX}
Lab wastes - RCl's from product samples, Fischer reagent	Allyl Chloride	None	Vacuum Truck	RCl/water separator system	Vacuum Truck	RCL's-Incineration Aqueous Waste - Bioponds or $THROX^8$
Allyl lights-chlorinated C 3's	Allyl Chloride	None	Drum or pipeline	--	Transport or Pipeline	Thermal Oxidizer or Feed to Perchlor
Fiber filter elements which contain organic toxics (Epi)	Glycerine Distribution	None	Truck	--	Truck	Incinerated at Rollins, Deer Park
Waste from analyses - exhausted Kar Fischer/SO_2 in pyridine solution	Chlor-Nitrogen Research	110760	Liquid dempster or 55 gallon drum	--	Dempster Service or Transport	Incinerator
Overhead waste from the distillation of crude pentene nitrile	Chlor-Nitrogen Research	110760	Liquid Dempster	--	Dempster Service	Incinerator